



SWEET POTATO

Health Benefits

- ◆ Sweet potatoes are an excellent source of vitamin A, vitamin C, potassium, and fiber.
 - ◆ Vitamin A is a fat-soluble vitamin that helps maintain good vision, protects the body from infections, supports cell growth, and keeps skin healthy.
 - ◆ One large baked sweet potato counts as one cup of vegetables.
- ## Fun Facts
- ◆ To take in the amount of vitamin A that is in one sweet potato you would have to eat 23 cups of broccoli.
 - ◆ A favorite of herbivore (plant-eating) dinosaurs, sweet potatoes have been around since prehistoric times.
 - ◆ George Washington, our first American President, was a sweet potato farmer before he became our President.

Home Grown History

Domesticated sweet potatoes originated in Central and South America nearly 5,000 years ago and gradually spread to Mexico, the Caribbean, the West Indies, and parts of North America. When Christopher Columbus landed in the Caribbean in 1492, the Native Americans were growing sweet potatoes. Columbus brought the sweet potatoes back to Europe and the Spanish began cultivating them. They quickly began exporting sweet potatoes to England where they were included in spice pies. The French also started planting the vegetable at the request of Louis XV. However, after his death, the popularity of the sweet potato declined. Finally, the Portuguese carried sweet potatoes to Asia and Africa where they have become an important dietary staple.



Sweet potatoes have been grown in the United States since 1648, when they were first planted in Virginia. The sweet potato was a main source of nourishment for early homesteaders and for soldiers during the American Revolution and Civil War. The Pilgrims and Native Americans even ate sweet potatoes at the first Thanksgiving feast. Today, sweet potatoes are commonly grown and eaten in the American south, but the Irish potato remains more popular in the North likely due in part to the suboptimal sweet potato growing conditions observed in the northern part of the nation. However, as new cultivars of sweet potatoes are produced and the growing season continues to be lengthened through technology, WI farmers are starting to include sweet potatoes in their crops.

Many people call sweet potatoes yams, but yams and sweet potatoes are different foods. In fact, they are not even closely related as they are from different plant families. Yams are large, starchy roots grown in Africa and Asia and not typically available in American grocery stores. Yams are starchier and drier than sweet potatoes and have less fiber, vitamin C, calcium, and iron.

Student Activities

- ◆ Ask students to compare and contrast the nutrient composition of potatoes and sweet potatoes.
- ◆ Have students gather their favorite nutritious sweet potato recipes. Brainstorm ideas on how to incorporate sweet potatoes into school lunch menus. Have them meet with school nutrition staff to share their ideas.
- ◆ Ask students to research and write a report on the many medical and industrial uses of sweet potatoes throughout history.

Growing Sweet Potatoes in Wisconsin

Sweet potatoes require a long frost-free growing season to grow mature, large useful roots. The most common variety of sweet potato grown in the U.S. is the Beauregard which has pale reddish skin, a dark orange flesh, and a high yield. The Beauregard was first cultivated at Louisiana State University in the 1980's. This variety of sweet potato only needs around 100 days in the garden to produce a harvest.

Sweet potatoes are started from "slips." Slips are produced by sprouting sweet potato roots in moist sand or sawdust. The slips are transplanted into the soil after the last frost when the soil is warm to allow for maximal warm-weather growing. Slips are very fragile and should not be stored in water before planting. Keep unplanted slips in a warm, dry space and plant with 5-7 days after they are removed from the sprouting potato.

In Wisconsin, slips should be planted around the second or third week of June. Sandy, well-drained soil is the best environment for sweet potatoes, but they will grow in clay-based soil. Slips will should be planted 12-18 inches apart on a wide, raised ridge about 8 inches high. Before planting, gently break off the bottom leaf stalks. Only leave the top 1-2 upper most leaves. Using a tube, drill a hole into the ridge, place the slip in the hole, and refill with soil. Plant rows two to four feet apart.

After planting your slips, water them several days in a row. The slips will likely wilt after the transplant, however, with adequate water they will bounce back. Sweet potatoes need 2 inches of water per week, which is twice the amount the average plant needs. Mulching will help improve water retention, keep weeds down, and increase soil warmth. It is recommended to use black plastic mulch to speed early season growth as it captures and stores the sun's heat and warms the soil.

Sweet potatoes will be ready to be harvested in late September. Remove the top growth and dig 1-2 feet around the sweet potato cluster. Give a wide enough digging area so you do not damage the vegetables. Once harvest, spray the plant with water but do not rub the plants as the skin will come off easily. Sweet potatoes should be cured following harvest. This will thicken the skin for better protection, longer storage, and will allow the starches to convert to sugars, making the potatoes sweeter. After harvest, allow the roots to dry on the ground for a few hours and then place them in a warm room for curing (85° F and 85% humidity is optimal) for 10 to 14 days.

Beyond the Classroom

Ask students to note during their next trip to the grocery store if sweet potatoes are labeled as yams. If so, have them write a letter to the grocer explaining the differences between the two foods.

For More Information:

North Carolina Sweet Potatoes:
<http://www.ncsweetpotatoes.com/>

University of Illinois Extension:
<http://urbanext.illinois.edu/veggies/sweetpotato.cfm>

Classroom Cooking—Sweet Potato "Butter"

Makes 24 taste test servings (2 Tbsp butter + 1 cracker)

Ingredients:

- 2 cups mashed sweet potatoes
- 2 Tbsp lemon juice
- $\frac{3}{4}$ cup honey
- Paper cups/plates
- 1 Tbsp cinnamon
- 24 graham crackers

Directions:

1. Mix sweet potatoes, honey, and cinnamon together in a microwave safe bowl
2. Microwave on 50% power for 5-6 minutes (cook times may vary), stirring after every minute. Mixture should be thick and smooth when done.
3. Serve while warm or place in refrigerator to chill and serve cold. Serve with one graham cracker.

Exploring Wisconsin Sweet Potatoes — Taste Test Activity

What You Will Need:

- Raw sweet potatoes cut into sticks and cooked sweet potatoes (mashed or cubed) portioned into small paper cups
- *Home Grown: Tastes of WI* resource guide
- Taste test survey, paper and pencils

Activity:

- Have students observe, touch, smell, and taste each sample and make notes describing the different tastes. Extend the activity in class by comparing and contrasting the varieties and making a graph showing the likes and dislikes of the class.

